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| 09/766,526 | 01/19/2001 | Gordon J. Harris | 07072-134001 / CS-003 | 9781 |

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| EXAMINER |
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SHAH, SANJIV

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| ART UNIT | PAPER NUMBER |
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2176

DATE MAILED: 02/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/766,526

Applicant(s)

HARRIS ET AL.

Examiner

Sanjiv D. Shah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 4,5,7,12,13,15,20,21 and 23 is/are allowed.
6) ☒ Claim(s) 1-3,6,8-11,14,16-19,22,24 and 25 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-3, 6, 8-11, 14, 16-19, 22 and 24-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Wolff. (Patent # 6,067,545).

Regarding claims 1, 9, 17, Wolff teaches the claimed invention of managing a storage resources associated with a network having at least one storage resource coupled to at least one server and one client over one data path is shown in fig. 1c, wherein storage 118A and 118B is connected to server 104c and 106c and client 100A over data path 90A-C.

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Wherein said server manages said storage resources over said data path (see col. 6, lines 50-55)

And wherein said client directs I/O request to said storage resources (See col. 5, lines 22-27) and redirects I/O request to said server upon the detection of failure condition. (See Col. 18, lines 53 - Col. 19, lines 11 and Col. 27, lines 37-lines 65).

Since the client is connected through server to storage resources, and since the client gets access to the storage resources, it is inherent that the client receives the description of storage resources from the server. Also the cited reference does teach a direct connection between clients and resources as described in col. 4, lines 46-48.

Regarding claims 2, 3, 10, 11, 18, 19, Wolff teaches the claimed invention of client authentication and communication of volume information associated with allocated space. (col. 6, lines 55-65)

Regarding claims 6, 14, 22 and 25, Wolff teaches the claimed invention of changing volume configuration and restricting the access during that time as described in col. 8, lines 1-25, wherein a lock restricts other server to rebalance while committing volume change. Since the client is connected through server node, it is inherent that the client is restricted access during committing changed configuration.

Regarding claim 8, 16, 24, Wolff teaches the claimed invention of communication between clients and servers over second data path as shown in fig 1C, element 108, which is a LAN/WAN. It is inherent that the network connection has multiple pathways.

Allowable Subject Matter

3. Claims 4, 5, 7, 12, 13, 15, 20, 21 and 23 are allowed over the cited prior art.

Regarding claims 4, 12 and 20, the cited prior art fails to teach alone or in a combination a method of allocating new storage space in response to a receipt of a failure condition, initiating the recovery in cooperation with new storage space and communicating the status as claimed. Claims 5, 13, 21, being dependant on claims 4, 12 and 20, they are allowable for at least the same reason.

Regarding claims 7, 15 and 23, the cited prior art fails to teach providing a copy of unmodified data blocks before modification and a back up process using a pseudo-device to read unmodified data blocks as claimed. Therefore the invention is allowable over the cited prior art.

Response to Arguments

4. Applicant's arguments filed 11/21/2003 have been fully considered but they are not persuasive.

Applicant argues that the cited prior art teaches indirect access from client to storage resources since the access is through server and therefore does not meets the claimed limitation. Examiner disagrees. Specifically, the claimed invention does not claim direct

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access without the server. The claimed invention on the contrary teaches receiving the description of the storage resources through the server. Therefore it is inherent that the server is in loop between client and resources. Applicant also argues that the cited reference does not receive description of the storage resources from the server.

Examiner disagrees. Specifically, as cited above, client do access storage resources, therefore it is inherent that the client has information on storage resources. Also the cited reference does teach a direct connection between clients and resources as described in col. 4, lines 46-48. Therefore applicant's arguments are not persuasive.


5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanjiv D. Shah whose telephone number is (703) 305-8355. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.



Sanjiv D. Shah
Primary Examiner
Art Unit 2172

Sanjiv Shah
February 7, 2004